COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF LOUISVILLE GAS AND)		
ELECTRIC COMPANY FOR APPROVAL OF)		
COMPLIANCE PLAN AND TO ASSESS A)		
SURCHARGE PURSUANT TO KRS 278.183 TO)	CASE NO.	94-332
RECOVER COSTS OF COMPLIANCE WITH)		
ENVIRONMENTAL REQUIREMENTS FOR COAL)		
COMBUSTION WASTES AND BY-PRODUCTS)		

ORDER

On October 7, 1994, Louisville Gas and Electric Company ("LG&E") filed an application, pursuant to KRS 278.183, for authority to assess an environmental surcharge to recover its current costs of compliance with the Clean Air Act Amendments of 1990 ("CAAA") and other environmental requirements which apply to coal combustion wastes and by-products from facilities used to generate electricity from coal. LG&E proposed to implement the surcharge in May 1995, and estimated that it would recover approximately \$5.5 million in 1995 and \$8.3 million in 1996. Pursuant to KRS 278.183(2), the Commission must: (1) consider and approve a compliance plan and rate surcharge if the Commission finds the plan and rate surcharge reasonable and cost-effective for compliance with the applicable environmental requirements; (2) establish a reasonable return on compliance-related capital expenditures; and (3) approve the application of the surcharge.

The Commission granted motions for full intervention to the Kentucky Industrial Utility Customers ("KIUC"); the Attorney General's Office ("AG"); Metro Human Needs Alliance, Inc., People

Organized and Working for Energy Reform and Anna Shed (hereinafter referred to collectively as "Residential Intervenors"); and Jefferson County, Kentucky. A public hearing on this matter was held February 7-9, 1995, at the Commission's offices in Frankfort, Kentucky.

ENVIRONMENTAL COMPLIANCE PLAN

As required by KRS 278.183, LG&E filed, as part of its application, an environmental compliance plan consisting of five capital projects and new permit fees necessitated by various federal, state, and local environmental regulations applicable to LG&E's coal-fired generating stations. The capital projects, estimated to cost \$85,655,000, include: (1) improving the sulfur dioxide ("SO2") removal systems and associated air quality equipment at the four Mill Creek generating units; (2) correcting the emission of reactive particles from the Mill Creek units; (3) installing continuous emission monitoring systems on all eight of LG&E's coal-fired generating units; (4) installing a new electrostatic precipitator at Cane Run Unit 4; and (5) installing low nitrogen oxide burners with associated boiler control systems at all eight units. The permit fees included in LG&E's compliance plan are associated with a new permit program created by Title V of the CAAA and are based on LG&E's actual pollutant emission levels.

In support of its environmental compliance plan, LG&E presented testimony and several technical and engineering evaluation studies and reports. This evidence shows that LG&E's five capital projects and permit fees are related to compliance

with the CAAA and other governmental regulations pertaining to coal combustion wastes and by-products resulting from the production of electricity from coal. Furthermore, the project evaluation studies and reports show that LG&E sufficiently analyzed alternative compliance methods, selecting those that are cost effective, and utilized competitive bidding procedures in selecting equipment and vendors. The intervenors' evidence did not address LG&E's environmental compliance plan.

Based on a review of LG&E's environmental compliance plan, its technical and engineering studies and reports, and supporting documentation, the Commission finds that LG&E's environmental compliance plan is reasonable and cost-effective, and should be approved.

SURCHARGE MECHANISM AND CALCULATION

LG&E proposed to recover the costs of its environmental compliance plan through a surcharge mechanism defined in its proposed Rate Schedule ECRS. LG&E modeled its proposal primarily on the mechanism approved for Kentucky Utilities Company ("KU") in Case No. 93-465.

Using an incremental approach, LG&E identified specific qualifying environmental compliance projects which have been added

Case No. 93-465, The Application of Kentucky Utilities Company to Assess a Surcharge Under KRS 278.183 to Recover Costs of Compliance with Environmental Requirements for Coal Combustion Wastes and By-Products.

last general rate case, Case No. 90-158. since its An environmental rate base was proposed consisting of capital expenditures for qualifying assets placed in service after the test year in Case No. 90-158, the twelve months ending April 30, 1990. Operating expenses would include depreciation, amortization, property taxes, other taxes, and insurance expenses applicable to the environmental compliance facilities, operation and maintenance ("O&M") expenses related to the installation and operation of the qualifying facilities, and the annually recurring federal, state, and local permit fees. LG&E also proposed to include the net proceeds from the sales of emission allowances and scrubber byproducts as credits in the determination of the environmental compliance revenue requirements.

While proposing to include O&M expenses and returns on inventories, supplies, and cash working capital in the surcharge formula, LG&E stated that it was not seeking to include those items for the five projects detailed in its compliance plan. LG&E stated that it was including those components to establish a framework for its surcharge and to preserve the option to include these items in the surcharge for future compliance projects.³

In addition, LG&E proposed that the 6-month and 2-year reviews required by KRS 278.183 be handled in a manner consistent with the

² Case No. 90-158, Adjustment of Gas and Electric Rates of Louisville Gas and Electric Company.

Response to Items 2 and 9 of the Commission's November 9, 1994 Order.

Commission's decisions in the KU and Big Rivers Electric Corporation ("Big Rivers") environmental surcharge cases. LG&E proposed that the 6-month review periods encompass the expense months of March through August and September through February. An over and under recovery mechanism was also proposed, modeled on LG&E's gas supply clause which is filed quarterly with the Commission.

The AG contends that the environmental surcharge is unlawful and unreasonable and refers to the current court challenge to the Commission's authorization of a surcharge for KU in Case No. 93-465. The AG claims that Jefferson County Cross-Examination Exhibit No. 1 shows that LG&E is presently over earning, and that the surcharge will magnify the level of over earning. 4 The AG argues that LG&E's selection of an incremental approach similar to KU's is inappropriate given the differing amounts of environmental costs included in their respective base rates. He recommends that the incremental approach be rejected and LG&E be required to use a methodology⁵ to account for the "base current" level of environmental costs already in current rates. The AG further recommends that the Commission provide LG&E with guidance on how to prepare the base period portion of the methodology.

The Residential Intervenors stated that the Commission has already provided for the recovery of LG&E's environmental costs in

⁴ AG Brief at 2.

⁵ AG Brief at 7-8.

Case No. 90-158 and, therefore, LG&E's application should be rejected. The Residential Intervenors argue that LG&E is requesting unconstitutional relief, and that the Commission's prior interpretations of KRS 278.183 are unconstitutional, and urge the Commission to exercise its statutory authority to make KRS 278.183 consistent with the constitutional requirement of fair, just and reasonable rates. In the alternative, they urge the Commission to reject the surcharge methodology proposed by LG&E, and adopt the base current methodology established for Big Rivers in Case No. 94-032.

MIUC also recommended adoption of the base current methodology, noting that the Big Rivers approach was a more balanced and reasonable interpretation of KRS 278.183." KIUC urged the exclusion of compliance projects initiated prior to January 1, 1993 on the grounds that their inclusion would constitute retroactive approval of projects already completed or under construction. "KIUC suggested that LG&E be required to determine and reflect in its surcharge calculations the changes in O&M

[&]quot; Residential Intervenors Brief, at 1 and 3.

⁷ <u>Id.</u> at 3-8.

[&]quot; Case No. 94-032, Application of Big Rivers Electric Corporation to Assess a Surcharge Under KRS 278.183 to Recover Costs of Compliance with Environmental requirements of the Clean Air Act.

Falkenberg Direct Testimony, at 19.

¹⁰ Id. at 16-19.

expenses related to environmental equipment. Further, KIUC recommended that LG&E be required to deduct the costs of environmental systems included in existing rates which have been or will be retired or replaced by the five projects in LG&E's compliance plan. 12

KIUC also made a constitutional challenge to the statute. 11 KIUC argued that LG&E failed to demonstrate that the costs it sought to include in the surcharge were not already recovered in existing rates, stating that a surcharge was only proper when a deficit in current environmental cost recovery existed. 14 KIUC also argued that LG&E's existing rates were not established in Case No. 90-158, but rather by adjustments to base rates due to the Fuel Adjustment Clause ("FAC") and the demand side management ("DSM") surcharge approved in Case No. 93-150. 16

Surcharge Approach

Constitutional challenges to KRS 278.183 raise issues already pending judicial review and are not appropriate for adjudication by

^{11 &}lt;u>Id.</u> at 23.

^{12 &}lt;u>Id.</u> at 24.

KIUC Main Brief, at 8-14.

¹⁴ Id. at 15.

Case No. 93-150, The Joint Application for the Approval of Demand-Side Management Programs, a DSM Cost Recovery Mechanism, and a Continuing Collaborative Process on DSM for Louisville Gas and Electric Company, Order dated November 12, 1993.

the Commission. Until the courts rule otherwise, this Commission is required to implement KRS chapter 278 as enacted.

The Commission is presented with two alternative approaches for determining the eligible environmental costs to be recovered through a surcharge. LG&E's incremental approach is similar to that proposed by KU in Case No. 93-465; whereas intervenors' base current approach is similar to that proposed by Big Rivers in Case No. 94-032. The Commission accepted with modifications the utility's proposed approach in each of those prior cases and, when properly applied to reliable accounting data, either approach is reasonable for determining those costs eligible for surcharge recovery.

Based on the evidence of record, the Commission finds that it is reasonable to use a modified incremental approach, to determine the surcharge for the first two years. This finding is based on LG&E's showing that it does not have accounting records in sufficient detail upon which to apply accurately a base current methodology. Contrary to the AG's claim, the account balances shown in LG&E's Federal Energy Regulatory Commission Form 1 are unreliable for use in this proceeding since many of those balances are estimated, not actual, amounts. Furthermore, the base current approach proposed by the intervenors was incomplete and not in sufficient detail to allow verification of all rate base and capital items.

The incremental approach must be modified, however, to recognize that certain environmental compliance costs related to

the five compliance projects are already included in existing rates. The plant in service in Case No. 90-158 which LG&E has identified as retired or to be retired due to the implementation of the five compliance plan projects constitutes costs already included in existing rates. To require ratepayers to pay a surcharge for the costs of the five compliance projects while the existing rates include the cost of related plant no longer in service would be unreasonable and a violation of KRS 278.183(2).

The Commission notes that the Residential Intervenors have seriously misinterpreted portions of the July 19, 1994 Order in Case No. 93-465 approving an environmental surcharge for KU. That Order rejected the AG's recommendation to investigate KU's existing rates to determine if they are fair, just, and reasonable under KRS 278.030(1) because the surcharge statute expressly prohibits such an exercise. That Order does not say, however, that no investigation was conducted of the surcharge to determine that it was reasonable and cost effective under KRS 278.183(2)(a). To the contrary, the Commission conducted an intensive six month investigation of the surcharge and ultimately approved it only after finding that it was reasonable and would not allow double recovery.

LG&E has clearly demonstrated that the components of its compliance plan were initiated after the end of the test year in its last general rate case. The Residential Intervenors and KIUC

Response to Item 10 of KIUC's November 7, 1994 Data Request.

have provided no evidence to support the claim that LORE's current compliance plan costs are already included in existing rates.

In arguing that the rates set by the Commission, Case No. 90-158, already provide for LGkE's recovery of environmental compliance costs, the Residential Intervenors have assumed facts not in issue in that case and quoted language out of context from the December 21, 1990 Order. The return authorized in that case did not include a cushion to fund future expansion to meet the requirements. To the contrary, the CAAA was not enacted until November 15, 1990 and Case No. 90-158 was based on an historic test year ended April 30, 1990. The cost of compliance under the CAAA or other post test year environmental requirements was not quantified in that case.

In establishing a reasonable rate of return for LGEE in Case No. 90-158, the December 21, 1990 Order found that the return authorized, "would allow LGEE to attract capital at a reasonable cost and maintain its financial integrity to ensure continued service and provide for necessary expansion to meet future requirements, and also result in the lowest possible cost to ratepayers." Thus, by maintaining its financial integrity, LGEE would be able to: 1) ensure continued service; and 2) provide for necessary expansion to meet future requirements. It is a utility's financial integrity that allows it to sell new equity and debt to finance the facilities needed to continue to provide service and meet future service requirements. It was not anticipated that LGEE would pay for compliance facilities out of the authorized return.

Rather, the authorized return was intended to allow LG&E an opportunity to recover its then current cost of debt and equity and to maintain its financial integrity to be able to finance additional facilities as needed.

KIUC's claim that a surcharge is only proper when there is a deficit in current environmental cost recovery is without merit. KRS 278.183(2) does not condition a surcharge on the showing of a deficit in the recovery of total environmental related costs. Rather, it authorizes the recovery by surcharge of compliance costs associated with the compliance plan if such costs are not already in existing rates. Further, the statute itself prohibits any analysis in a surcharge proceeding of whether existing rates are sufficient, insufficient, or excessive in relation to current total This prohibition is set forth in KRS 278.183(1), which costs. recovery of eliqible compliance the authorizes "[n]otwithstanding any other provision of this chapter [KRS 278]." As the Commission found in the KU Case No. 93-465, should anyone believe that the utility's existing rates are excessive, KRS 278.260 provides a full and complete remedy for the review of such claims.17

PSC Case No. 93-456, Order dated July 19, 1994, page 11. The AG's argument, AG Brief at 2, that LG&E's current rates are excessive is based on a financial exhibit for calendar year 1993. Whether this exhibit is representative of LG&E's current financial condition is beyond the scope of this proceeding under KRS 278.183, but may properly be presented in a complaint filed under KRS 278.260.

Both the Residential Intervenors and KIUC have expressed concern about LGAE focusing on environmental assets added since its last general rate case, rather than environmental costs. While they correctly note that costs and assets are not the same, their concern is groundless. KRS 378.183(1) states, in pertinent part, that the costs to be recovered by surcharge "[S]hall include a reasonable return on construction and other capital expenditures... for any plant, equipment, property, facility, or other action to be used to comply with applicable environmental requirements set forth in this section." Thus, an examination of the assets in the environmental compliance plan is essential to determine the current cost of environmental compliance and to ensure that such costs are not already included in existing rates. While compliance plan assets are not synonymous with compliance plan costs, the surcharge statute requires an analysis of the former to determine the latter.

KIUC's argument that any project started prior to January 1, 1993 should be excluded from the surcharge is baseless. The surcharge statute became effective on July 14, 1992, and provides that on or after January 1, 1993, a utility is entitled to recover by surcharge eligible environmental compliance costs. The statute does not require Commission approval of the utility's compliance plan prior to construction but, rather, prior to implementation of a surcharge. There are no specific time restraints in KRS 278.183 concerning when the capital expenditures are actually made, only that the surcharge recovery be limited to current costs. The inclusion in LG&E's compliance plan of projects begun or completed

prior to January 1, 1993 does not constitute retroactive application of RRS 278.183 because only the <u>current</u> costs of those projects, i.e. original cost less all accumulated depreciation, are eligible for surcharge recovery.

argument that LG&E's existing rates KIUC's were not established in Case No. 90-158 is incorrect for the environmental costs at issue here. Case No. 90-158 was LG&E's last general rate case and a reasonable level of environmental compliance costs were then included in LG&E's base rates. Those base rates continue in effect today except for adjustments to reflect variations in fuel costs pursuant to 807 KAR 5:056, and costs associated with demand side management programs pursuant to Case No. 93-150. Thus, for the requisite analysis under KRS 278.183 to determine whether current compliance plan costs are included in existing rates, reference must be made to the last proceeding in which environmental costs were included in rates, which was Case No. 90-158.

There is no merit to KIUC's argument that LG&E has failed to meet the requirements of KRS 278.183 simply because O&M expenses were not included in the proposed surcharge. That portion of KRS 278.183(1) which states that the environmental costs shall include reasonable operating expenses merely defines what constitutes recoverable costs, it does not mandate that a utility seek recovery of such costs. Furthermore, since LG&E's compliance plan consists of specific projects, only O&M expenses on a project specific basis are eligible for recovery. The record evidence demonstrates that

LG&E's accounting system does not maintain O&M expense information on a project specific basis. Under these circumstances, LG&E's inability to recover O&M expenses does not render it ineligible for an environmental surcharge.

While LG&E's incremental approach ia acceptable for implementing the aurcharge, an environmental compliance rate base should be established for use in the future. The five projects approved in this Order, as well as any subsequently approved, should be included. This environmental rate base should be maintained, with appropriate credits for accumulated depreciation, until LG&E's next general rate case. At each two year review, the then current annual costs associated with the environmental rate base will be incorporated into LG&E's base rates. Subsequent calculations of the surcharge will be based upon the then current costs associated with this continuing environmental rate base less the amount incorporated into base rates. At such time as LG&E files a general rate case, all environmental costs will be identified and a new environmental rate base established.

Qualifying Costs

LG&E modeled its Rate Schedule ECRS on the methodology approved for KU in Case No. 93-465. The costs included in Rate Schedule ECRS are:

1. A return on its Environmental Compliance Rate Base ("rate base"), which includes net plant for completed facilities, construction work in progress ("CWIP"), inventories, supplies, cash

working capital, deferred income taxes, and deferred investment tax credits.

- 2. Environmental compliance operating expenses which include:
 - a. O&M expenses not included in base rates.
 - b. Permit fees.
 - c. Depreciation and amortization accruals.
 - d. Property and other applicable taxes.
 - e. Insurance.
- f. Credits for the net proceeds from the sale of emission allowances and scrubber by-products.

As noted earlier, LG&E's proposal fails to recognize that certain environmental compliance costs related to its compliance plan are already included in existing rates. LG&E has identified plant in service as of the test-year end in Case No. 90-158 which has been or will be replaced by the plant additions included in the approved compliance plan. In order to recognize these environmental compliance costs already included in existing rates, LG&E's surcharge mechanism should include an adjustment provision.

Rate Base. A modified rate base should be used in determining the environmental compliance revenue requirements. LG&E's rate base calculation should include the capital expenditures associated with its approved compliance plan, with eligible pollution control construction work in progress ("CWIP") being added to eligible pollution control plant in service. From this total, accumulated depreciation on eligible pollution control plant, pollution control

plant, pollution control deferred income taxes, and pollution control deferred investment tax credits ("ITCs") should be substantial. Further, related environmental compliance costs of \$12,588,441 in eligible pollution control plant in service and \$3,095,533 in accumulated depreciation should be deducted from rate base to recognize those costs already included in existing rates.

The total rate base should be divided by 12, resulting in an average monthly rate base. The rate of return applied to this rate base is discussed later in this Order. This rate of return will be adjusted for income taxes.

LG&E's data responses appear to indicate that any amounts related to Trimble County Unit 1 ("Trimble County") reflect 75 percent of the total costs. The Commission expects that all calculations associated with LG&E's surcharge reflect Trimble County at 75 percent of total.

The rate base calculation does not include inventories, supplies, or cash working capital because LG&E was not seeking to include these items for recovery in this proceeding. LG&E stated that it has no objection to removing these items from the tariff if doing so would not impair its ability to request recovery of such costs associated with projects proposed in future proceedings.¹⁹

Response to Item 10 of KIUC's November 7, 1994 Data Request.

Response to Item 7 of the Commission's December 8, 1994 Order.

The Commission will exclude these items from the surcharge approved in this proceeding, subject to LG&E's right to seek future recovery.

Operating Expenses. For determining revenue requirements, the operating expenses related to the eligible pollution control plant in service should be the monthly amounts for: permit fees. depreciation and amortization accruals, property and other applicable taxes, and insurance. In addition, any monthly emission allowance expense, as defined in Account No. 509 by the Federal Energy Regulatory Commission, and monthly cost of any consultant employed by the Commission to assist in reviewing the current compliance plan should be included. The operating expenses should also be adjusted to reflect costs of the compliance plan included in existing rates. LG&E has identified test-year compliance plan cost amounts for depreciation expenses of \$437,790, taxes of \$14,000, and insurance of \$2,700,20 included in existing rates. The total of these expenses should be divided by 12 to arrive at an average monthly expense adjustment.

LG&E is not seeking to include O&M expenses for recovery and has no objection to removing O&M from the tariff if doing so would not impair its ability to request recovery of such costs associated with projects proposed in future proceedings.²¹ Thus, O&M will be

Response to Item 10 of KIUC's November 7, 1994 Data Request.

Transcript of Evidence ("T.E."), Vol. II, February 8, 1995, at 7.

excluded from the approved surcharge, subject to LG&E's right to seek future recovery.

Net Proceeds from By-Product and Emission Allowance Sales. The Commission will require the net proceeds from the sale of scrubber by-products and emission allowances to be reflected as a credit, or offset, in determining the current environmental compliance revenue requirement. These sales should be reflected in the month the revenues are received. In addition, LG&E has identified allowance sale proceeds of \$223,596²² which will be included in the first month of the surcharge.

Review and Audit Process

LG&E included as part of its surcharge application a series of reporting formats for the monthly surcharge calculation. The Commission has revised these formats to reflect the mechanism described in this Order. The revised formats are attached to this Order as Appendix B, which also includes formats for information to be filed at the time of the 6-month and 2-year reviews. The monthly formats should be filed when LG&E submits the amount of the monthly surcharge. As experience is gained in the monthly reporting and review processes, the Commission may modify these formats or prescribe additional formats. A form to be prepared by LG&E when it proposes to include a new capital investment in the surcharge has also been included.

²² Blake Prepared Testimony, at 11.

The Commission accepts LG&E's proposal concerning the 6-month and 2-year reviews required by KRS 278.183(3). In addition to the formal reviews, the Commission will have its Staff perform on-site audits of the surcharge records as necessary. The Commission will also accept LG&E's proposal for an over and under recovery mechanism modeled on its gas supply clause.

Formula to Calculate the Surcharge Factor

The monthly environmental surcharge gross revenue requirement, $E\left(m\right)$, as modified by this Order, is as follows:

$$E(m) = [(RB/12)(ROR)] + OE - BAS$$

Where:

- E(m) = Environmental Surcharge Gross Revenue Requirement
- RB = Environmental Compliance Rate Base, adjusted for eligible Pollution Control Plant in Service and Accumulated Depreciation already included in existing rates
- ROR = Rate of Return on Environmental Compliance Rate Base, adjusted or "grossed up" for Income Taxes
- OE = Operating Expenses [Depreciation and Amortization Expense, Property and Other Applicable Taxes, Insurance Expense, Emission Allowance Expense, Surcharge Consultant Fee, and Permit Fees; adjusted for the Average Monthly Expense already included in existing rates]

BAS = Net Proceeds from By-Product and Allowance Sales

The Environmental Surcharge Factor is calculated by dividing E(m)by the Average Monthly Revenue for the 12 Months Ending with the Current Expense Month R(m).

Revenues Included in Surcharge Calculation

LG&E proposes to calculate the surcharge as a percentage of revenues which will then be applied to customers' bills. Use of the percentage of revenues methodology will result in all customers receiving equal percentage increases on their electric bills. LG&E opines that this methodology allows for case of billing and ensures that all customers pay a proportionate share of the costs of environmental compliance. LG&E cites the Commission's decisions in the KU and Big Rivers' surcharge cases approving the percentage of revenues method.

KIUC, citing the KU and Big Rivers' decisions, contends that LG&E's proposal should be modified so that the revenues included in the surcharge calculation include some portion of off-system sales revenues, i.e., revenues from wholesale sales. In this manner, KIUC maintains, some of the costs of environmental compliance will be apportioned to LG&E's sales to other utilities. KIUC argues that LG&E's proposal, which assigns all costs to retail customers, results in retail customers subsidizing wholesale customers. The AG and Residential Intervenors support KIUC's proposal.

In response to KIUC's proposal, LG&E argues that its sales to off-system customers do not affect the level of capital costs or fixed operation and maintenance costs incurred on the projects in its compliance plan. LG&E maintains that its generating system was installed to meet the needs of its retail customers and that any improvements necessitated by environmental standards are similarly made to meet retail customers' needs. LG&E contends that assigning

environmental capital costs to its off-system sales, which consist primarily of short-term spot sales in the bulk power market, would effectively deny it any chance to recover those costs and would be inconsistent with the past ratemaking treatment of its off-system sales. LG&E argues that the only off-system revenues appropriately included in calculating the surcharge factor would be from long-term, firm off-system sales or full requirements off-system sales, both of which would be priced at LG&E's full cost of service. LG&E has traditionally had no such sales.

KIUC counters LG&E's argument, claiming that all sales have some environmental cost consequence regardless of the jurisdiction in which the customer operates. KIUC contends that the current use of LG&E's generating system, not the planned use, should determine the assignment of costs between jurisdictions. KIUC maintains that although LG&E may derive smaller contributions, or margins, from off-system sales if some part of environmental compliance costs are assigned to those sales, it will not be denied the opportunity to recover such costs.

The Commission will approve the use of the percentage of revenues method proposed by LG&E. However, we will require that total revenues, including all off-system sales revenues, be included in the surcharge calculation. This is consistent with the

Commission's earlier decisions in both the KU and Big Rivers surcharge cases.21

LG&E argues that since its generating facilities were installed to meet the needs of its retail customers, all costs of environmental improvements should be borne by those customers. The Commission rejects this argument. LG&E's generating facilities are currently used to make off-system sales and, thus, the cost of environmental improvements should be allocated to both retail and off-system sales. This results in assigning some environmental costs to all sales and is analogous to the principles espoused in the base, intermediate and peak ("BIP") allocation methodology previously advocated by LG&E in general rate cases. The BIP method recognizes that some capacity costs should be assigned to all periods, including the off-peak periods during which spot sales are made in the bulk power market.²⁴

Contrary to LG&E's assertions, the surcharge calculation approved for KU, based on KU's proposal, included 'total company revenues' consisting of 'total jurisdictional revenues' and 'total non-jurisdictional revenues'. Also contrary to LG&E's arguments, a percentage of revenues methodology was approved for Big Rivers in order to maintain the cost allocations included in existing rates, which already reflected the impact of Big Rivers' debt restructuring plan. Big Rivers had proposed a different allocation methodology, but had included all sales, including off-system sales, in its allocation proposal.

As the type of sale and market conditions determine the price charged and the level of revenue generated, there will likely be a proportionately small amount of costs allocated to non-firm off-system sales which normally generate small margins, i.e., contributions to fixed costs.

LG&E argues that its proposal to exclude off-system sales revenues from the surcharge calculation is consistent with the treatment of its off-system sales in general rate cases. The Commission disagrees. While all revenues and expenses are subject to extensive analysis in a general rate case, only eligible compliance costs are reviewable in this proceeding. Historically, all off-system revenues and expenses have been allocated to retail customers in LG&E's general rate cases. However, since KRS 278.183 limits the review here to eligible compliance costs, fairness requires that such costs be ratably allocated to off-system sales to preserve for retail customers the allocation balance created in LG&E's last general rate case.

Emission Allowance Management Strategy Plan

In response to Commission inquiries, LG&E indicated that it currently has no written policies, plans, or procedures addressing the management of emission allowances. LG&E also stated that there was no urgency to develop a written strategy, and that it would closely monitor the situation and would develop a formal written plan when it was beneficial and worthwhile to do so. 26

The Commission acknowledges that LG&E is a Phase II utility under the CAAA, and no emission reductions are necessary under the Phase I period which extends through 1999. If the allowance

Response to Item 6 of the Commission's November 9, 1994 Order.

Response to Item 4 of the Commission's December 8, 1994 Order.

markets develop as anticipated, LGAE could be presented with opportunities to maximize its benefits from Phase II allowances. In addition, LGAE's system planning will be affected by its allowance strategy.

The Commission will require LG&E to develop and file an Emission Allowance Management Strategy Plan by the time of the first 6-month surcharge review. Appendix A of this Order provides an outline of issues LG&E's plan should address.

RATE OF RETURN

LG&E proposed a rate of return of 5.60 percent on the compliance related capital expenditures included in its environmental rate base. The rate is based on the actual cost of LG&E's last pollution control bond issue in October 1993 and LG&E proposes to use it until its next general rate case. None of the intervenors proposed an alternative rate of return. The Commission, having considered the evidence presented in this case, finds a return of 5.60 percent is reasonable.

IT IS THEREFORE ORDERED that:

- 1. LG&E's environmental compliance plan, consisting of five capital projects and environmental permit flees to meet federal, state, and local environmental regulations is approved.
- 2. LG&E's Rate Schedule ECRS as modified herein is approved for service on and after May 1, 1995.
 - 3. LG&E's proposed Rate Schedule ECRS is denied.

4. LG&E shall file by October 6, 1995 an Emission Allowance Management Strategy Plan that addresses the issues outlined in Appendix Λ .

5. LG&E's rate of return of 5.60 percent for the environmental surcharge is approved.

6. Average monthly revenue R(m), as defined in LG&E's Rate Schedule ECRS, shall be modified to include all revenues from off-system sales.

7. The reporting formats included in Appendix B shall be used, as specified therein, for each monthly filing, 6-month review, 2-year review, and new pollution control capital investment.

8. Within 10 days of the date of this Order, LG&E shall file with the Commission revised tariff sheets setting out the Rate Schedule ECRS as modified and approved herein.

Done at Frankfort, Kentucky, this 6th day of April, 1995.

PUBLIC SERVICE COMMISSION

Chalkman

vice Chairman

Commissioner

ATTEST:

Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 94-332 DATED APRIL 6, 1995.

EMISSION ALLOWANCE MANAGEMENT STRATEGY PLAN

The following outline identifies several issues which should be addressed in LG&E's management strategy plan. This listing is not intended to be all inclusive.

- I. LG&E's objectives in the management of its emission allowance inventory.
 - A. The current Phase II allowance inventory.
- B. The level of allowances required for a contingency reserve.
 - C. Determination of the contingency reserve.
- II. The extent of LG&E's involvement in the allowance markets.
- A. LG&E's view of the current market and market allowance prices.
- B. LG&E's expectations of emission allowance prices.
- C. How will LG&E analyze and review different market mechanisms (i.e., auctions, private trades) and alternative strategies (i.e., banking, sales, portfolio approaches)?
- III. Valuation of LG&E's allowances for planning purposes.
- IV. How will LG&E track and report its allowance activities, both internally and externally?

APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 94-332 DATED APRIL 6, 1995.

INDEX OF REPORTING FORMATS FOR LOUISVILLE GAS AND ELECTRIC COMPANY

ENVIRONMENTAL SURCHARGE

[Monthly, 6-Month Review, 2-Year Review, and Future Projects]

Note: Any amounts included in ES Forms 1.0 through 4.2 related to Trimble County Unit 1 shall reflect 75 percent of total costs. Attach worksheets showing the 75 percent calculation for any affected costs or expenses.

Monthly Reporting Formata:

ES Form 1.0	Calculation of E(m)	and Environmental	Surcharge
	Factor		-

ES Form 2.0	Revenue Requirements of Environmental
	Compliance Costs - Compliance Rate Base and Net
	Proceeds from By-Product and Allowance Sales

- ES Form 2.1 Revenue Requirements of Environmental Compliance Costs Operating Expenses
- ES Form 2.2 Plant, CWIP & Depreciation Expense
- ES Form 3.0 Monthly Average Revenue Computation R(m)

ES Forms 1.0 through 3.0 are to be filed each month.

Six-Month and Two-year Review Formata:

ES	Form 4.0	Recap of	Billing	Factors	and	Revenue
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ES Form 4.1 Recap of Environmental Compliance Rate Base

ES Form 4.2 Recap of Operating Expenses

Future Projects:

ES Project New Pollution Control Capital Investments
[To be completed when proposing additional capital investment for inclusion in the surcharge.]

LOUISVILLE GAS AND ELECTRIC COMPANY ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) AND ENVIRONMENTAL SURCHARGE FACTOR

	For the Expense	Month of	
	CF	ALCULATION OF E(m)	
	E(m) - [(RB/12) (ROR)] + OE	- BAS
Where: E(m) RB ROR OE BAS	<pre>= Environmer = Rate of Re Base, adju = Pollution</pre>	ntal Compliance Rat eturn on Environmen usted ("grossed up" Control Operating	tal Compliance Rate) for Income Taxes
	RB RB/12 ROR OE BAS		
	E (m)		= \$
	CALCULATION OF	ENVIRONMENTAL SURC	CHARGE FACTOR
		mental Surcharge Gr Requirement	°088 ≖ \$
	12 Month	Monthly Revenue for ns Ending with the Expense Month	er the
	Environmental S	Surcharge Factor:	E(m)/R(m) ≈ (% of Revenue)
Effective	Date for Billin	ng:	
Submitted	By:		
Title:			
Date Subm	itted:		

LOUISVILLE GAS AND ELECTRIC COMPANY ENVIRONMENTAL SURCHARGE REPORT REVENUE REQUIREMENTS OF ENVIRONMENTAL COMPLIANCE COSTS For the Expense Month of

DETERMINATION OF ENVIRONMENTAL COMPLIANCE RATE BASE

Net Eligible Pollution Control Plant	\$	
Eligible Pollution Control CWIP Excludi	ng AFUDC	\$
Subtotal		\$
Deductions:		
Net Accumulated Depreciation on Eligible Pollution Control Plant		
Pollution Control Deferred Income Taxes		
Pollution Control Deferred Investment Tax Credit		
Subtotal	\$	
Environmental Compliance Rate Base		s

NET PROCEEDS FROM BY-PRODUCT AND ALLOWANCE SALES DURING MONTH

	Allowance Sales ¹	Scrubber By-Products Sales	Total Proceeds from Sales
Gross Proceeds	\$	\$	s
Sales Expenses	\$	\$	\$
Net Proceeds	\$	\$	\$

'Include separate schedule indicating whether the allowances sold were allowances allocated from EPA, allowances from over-control, or purchased allowances.

LOUISVILLE GAS AND ELECTRIC COMPANY ENVIRONMENTAL SURCHARGE REPORT REVENUE REQUIREMENTS OF ENVIRONMENTAL COMPLIANCE COSTS For the Expense Month of

DETERMINATION OF OPERATING EXPENSES

DETERMINATION OF CHERAITM	y DILL	BHOHO		
Depreciation & Amortization Expense for Month		\$		
Property & Other Applicable Taxes for Month			\$	
Insurance Expense for Month			\$	
Emission Allowance Expense for Month			\$	
Surcharge Consultant Fee for Month			\$	
Permitting Fees for Month			\$	
Less: Average Monthly Expenses Already Included in Existing Rates ¹				
Depreciation Expense	\$	437,790		
Taxes	\$	14,000		
Insurance	\$	2,700]	
Total Annual Expenses Already Included in Existing Rates				
Average Monthly Expenses Already Included in Existing Rates (Total Annual divided by 12)			\$	37,874
Total Operating Expenses	\$			

¹Annual Expenses Already Included in Existing Rates were identified by LG&E in response to Item 10 of the Kentucky Industrial Utility Customers' November 7, 1994 Data Request.

LOUISVILLE GAS AND ELECTRIC COMPANY - ENVIRONMENTAL SURCHARGE REPORT PLANT, CWIP & DEPRECIATION EXPENSE For the Month Ended ______

Project Description	Eligible Plant in Service	Eligible Accumulated Depreciation	Eligible Net Plant in Service	CWIP Amount Excluding AFUDC	Eligible Net Book Value	Monthly Depreciation Expense
Mill Creek Air Quality Systems Improvement						
Mill Creek Reactive Particle Emission Project						
Continuous Emission Monitoring Systems						
Cane Run Unit 4 Precipitator						
Nitrogen Oxide Emission Controls						
Totals						
Less Plant in Existing Rates	\$ 12,588,441	\$3,095,533	\$ 9,492,908		\$ 9,492,908	
Net Totals						

Original Plant in Service Cost and Accumulated Depreciation for Compliance Plant Already Included in Existing Rates were identified by LG&E in response to Item 10 of the Kentucky Industrial Utility Customers' November 7, 1994 Data Request.

	Retail Ravanues					Wholesale Revenues	To	otal mpany
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Month	Base Revenues ^t	Fuel Clause Revenues	Environ- mental Surcharge	Total (2)+(3)+(4)	Total Excluding Environ. Surcharge (5)-(4)	Total	Total (5)+(7)	Total Excluding Environ. Surcharge (8)-(4)
1								
2								
3								
4								
5								
6							-	
7								
8								
9								
10								
11								1
12								1
			Month Average o	f Total Company	Revenues Exclu For 12 M	ding Environmen	tal Surcharge,	

DSM Revenues are to be included with Base Revenues.

LOUISVILLE GAS AND ELECTRIC COMPANY - ENVIRONMENTAL SURCHARGE REPORT SIX MONTH AND TWO YEAR REVIEW RECAP OF BILLING FACTORS AND REVENUE

For	the	Period _	through	

(1)	(2)	(3)	(4)	(5)	(6)	(2)	(8)	(9)
Expense Month	E(m) Gross Environ. Surcharge Revenue Requirement ¹	Total Company Revenue [Incl. FAC Excl. ES]	Environ. Surcharge Billing Factor'	Not Six Month & Environ. Surcharge Billing Factor	Retail Revenue [Incl. FAC Excl. ED]	Environ. Surcharge Revenue	Retail Over/ (Under) Collection	Total Company Over/ (Under) Collection
ļ		 						
				l. <u></u>				<u> </u>

For each Expense Month included in the Six Month Review Period, list the appropriate billing factors and revenues. At the Two Year Review, provide this information for the entire review period.

 $^{^{1}}E(m) = [(RB/12)(ROR)] + OE - BAS$

²Second previous month Column 2 / second previous month Column 3

^{&#}x27;Net of the month's Environmental Surcharge Factor and the appropriate Over/(Under) Collection adjustment.

Show the calculation of the Over/(Under) Collection adjustment on a separately attached worksheet.

^{*}Column 5 times Column 6

Over/(Under) Collection for Retail and Total Company modeled on LG&E's gas supply clause.

LOUISVILLE GAS AND ELECTRIC COMPANY - ENVIRONMENTAL SURCHARGE REPORT SIX MONTH AND TWO YEAR REVIEW

RECAP OF ENVIRONMENTAL COMPLIANCE RATE BASE For the Period _____ through _____

(1)	(a)	(3)	(4)	(5)	(6)	(7)
				Daductions		
Expense Month	Net Bligible Polittion Control Plant'	Higible Pollution Control CWIP REGIUM	Not Accumulated Depreciation on Not Eligible Pollution Control Plant	Pollution Control Deferred Income Taxes	Pollution Control Deferred Investment Tax Credits	Environmental Compliance Rate Base (Col. (2)+ (3)-(4)-(5)- (6)
		_				

For each Expense Month included in the Six Month Review Period, list the appropriate components of the Environmental Compliance Rate Base. At the Two Year Review, provide this information for the entire review period.

¹Bhow Eligible Poliution Control Plant and Accumulated Depreciation net of Compliance Plant Already Included in Existing Rates.

LOUISVILLE GAS AND ELECTRIC COMPANY - ENVIRONMENTAL SURCHARGE REPORT SIX MONTH AND TWO YEAR REVIEW RECAP OF OPERATING EXPENSES

For the Period _____ through _____

(1)	(2)	(1)	(4)	(5)	(6)	(7)	(8)	(9)
Expense Month	Dapraciation and Amortisation Expense	Property and Other Applicable Taxes	Inauranca Expansa	Emission Allowancs Expense	Burcharge Consultant Ve e	Permitting Pees	Less: Aver. Mo. Exp. Already Included in Existing Rates	Total Operating Expenses [Col. 2 thru 8]
							(37,674)	· · ·
		-					(37,874)	
							(37,874)	
							(37, 874)	
							(37,874)	
							(37,874)	

For each Expense Month included in the Six Month Review Period, list the appropriate components of the Operating Expenses. At the Two Year Review, provide this information for the entire review period.

LOUISVILLE GAS AND ELECTRIC COMPANY NEW POLLUTION CONTROL CAPITAL INVESTMENTS

PROJECT TITLE and DESCRIPTION:	
Dollar Amount of Project (Designate as Actual (A) or Estimated (E))	
List Applicable Environmental Regulation(s)	
List Applicable Environmental Permit(s)	
Indicate Construction Schedule [Designate as Actual (A) or Estimated (E)]	
Indicate Pollutant or Waste By-Product to be Controlled by Project	
Designate the Affected Generating Station and the Control Facility	
Indicate Any Replacements/Retirements of Compliance Plant Already Included in Existing Rates; Show Original Cost and Accumulated Depreciation Included in Existing Rates	
List All Internal Engineering or Economic Studies Completed in Support of the Project [LG4E should be prepared to provide access to any listed study if so requested)	
Identify the Management Authority who Approved the Project	
List any Internal Work Order Numbers Applicable to the Project	
heets as necessary.	each proposed project. Attach additions
ubmitted by:	
Ltle:	
ate Submitted:	